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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,117	09/09/2003	Osamu Ide	040894-5953	9213

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MORGAN LEWIS & BOCKIUS LLP  
1111 PENNSYLVANIA AVENUE NW  
WASHINGTON, DC 20004

EXAMINER

JACKSON, MONIQUE R

ART UNIT PAPER NUMBER

1773

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/657,117

Applicant(s)

IDE, OSAMU

Examiner

Monique R. Jackson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1, 13 and 14 recite the limitation "the viscosity" however there is insufficient antecedent basis for this limitation in the claims given that the term "viscosity", as it relates to a resin, may refer to various viscosities, i.e. intrinsic viscosity, melt viscosity, relative viscosity, apparent viscosity, etc., and though the specification makes mention of melt viscosity, limitations from the specification are not read into the claims. Further, if Applicant's intent is to refer to a "melt viscosity" of these resins, the Examiner also notes that a measured melt viscosity of a resin is dependent upon the conditions at which the measurement was obtained and hence the recitation of "melt viscosity" without including these conditions, i.e. applied shear stress or angular speed, also renders the claims indefinite.

3. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 10 recites the limitation "the back surface" in line 3. There is insufficient antecedent basis for this limitation in the claim.

4. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as

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the invention. Claim 11 recites the limitation "the top surface and the back surface" in line 3.

There is insufficient antecedent basis for this limitation in the claim.

5. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 13 recites the limitation "[t]he image supporting member according to claim 1, wherein in the thermoplastic resin of the color toner image, a polyester...is used as a main component" however, considering the claim is directed to an "image supporting member" and not an imaged member, it is unclear whether Applicant's intent is to claim the image supporting member without the image formed by the color toner particles or whether Applicant is now claiming the imaged member.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimoto (USPN 6,387,478.) Fujimoto teaches an electrophotographic image receiving material suitable for use in a color laser printer or copy machines, which would include an image forming unit and a fixing device as claimed, wherein the image receiving material comprises a base paper comprising polyolefin resin layers having a thickness of 5 to 30  $\mu\text{m}$  provided on both sides thereof, and a toner image receiving layer containing a toner acceptive material such as polyolefins like polyethylene, polypropylene, and olefin copolymers such as ethylene or

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propylene, wherein examples utilize a paper basis weight within the instantly claimed range (Abstract; Col. 1, line 10-Col. 2, line 65; Col. 3, lines 12-15; Col. 3, line 58-Col. 4, line 18; Col. 5, lines 7-22; Examples.) Fujimoto further teaches that an intermediate gelatin layer can be provided between the resin layer and the image receiving layer and that antistatic agents may be incorporated into any of the layers to provide a surface resistance of the image receiving layer suitable for adherence of the toner particles (Col. 6, lines 42-65; Col. 7, lines 3-60.) Matt particles may be further provided in the image receiving layer such as titanium dioxide or silica particles having a particle size of 0.001 to 50  $\mu\text{m}$ , and more preferably 0.05 to 30  $\mu\text{m}$  (Col. 7, lines 26-29.) Fujimoto teaches that the thickness of the receiving layer plays an important role to embed the toner sufficiently, and must be in the range of 3 to 50  $\mu\text{m}$ , a preferable range is 5 to 30  $\mu\text{m}$ , and a more preferable one is from 7 to 20  $\mu\text{m}$  (Col. 4, line 66-Col. 5, line 6.) Fujimoto further teaches that the layers may include pigments and additives such as titanium dioxide and teach a specific example utilizing about 18wt% titanium dioxide in a polyethylene resin as the upper resin layer (Col. 7, lines 26-60; Col. 14.)

8. Fujimoto does not teach the viscosity or more particularly, the melt viscosity, of the polymers utilized in the resin layer and the receiving layer as instantly claimed however Fujimoto teaches the use of the same polyolefin resins as instantly claimed and further teaches that the thermal properties of these polymers affect the properties of the resulting sheet and its performance with printing utilizing color toner particles wherein it is known in the art that the melt viscosity of the polymer of the image receiving layer affects the adherence of the toner particles and in turn, the image quality. Hence, one having ordinary skill in the art at the time of the invention would have been motivated to utilize the polyolefin resins taught by Fujimoto and

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further to utilize routine experimentation to determine the optimum thermal properties and melt viscosity to provide the desired image quality or adherence of the color toner particles based on a particular end use. Further, it would have been obvious to one having ordinary skill in the art at the time of the invention to utilize routine experimentation to determine the optimum amount of resin, white pigment and/or matting agent to add to the layers based on the desired thermal properties, whiteness and matting properties for a particular end use as taught by Fujimoto.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R. Jackson whose telephone number is 571-272-1508. The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Monique R. Jackson  
Primary Examiner  
Technology Center 1700  
July 25, 2005